03040201-170

(Pee Dee River)

General Description

Watershed 03040201-170 is located in Georgetown and Horry Counties and consists primarily of the *Pee Dee River* and its tributaries from the Little Pee Dee River to Winyah Bay. The watershed occupies 78,626 acres of the Lower Coastal Plain and Coastal Zone regions of South Carolina. The predominant soil types consist of an association of the Levy-Chastain-Yemassee-Yauhannah-Tawcaw series. The erodibility of the soil (K) averages 0.25; the slope of the terrain averages 1%, with a range of 0-2%. Land use/land cover in the watershed includes: 47.0% forested land, 25.8% forested wetland (swamp), 14.1% nonforested wetland (marsh), 5.6% scrub/shrub land, 4.2% water, 2.6% agricultural land, and 0.7% urban land.

This section of the Pee Dee River accepts drainage from its upper reaches, together with Conch Creek (Sally Branch), Bradley Branch (Sheep Pen Branch), and Bull Creek (Cowford Swamp, Horsepen Branch). Also draining into the Pee Dee River are Vandross Bay, Yauhannah Creek (Tupelo Bay), Pole Castle Branch, St. Pauls Branch, Cypress Creek, and Chapel Creek. Little Bull Creek connects Bull Creek to the Pee Dee River and Cooter Creek (Joe Bay) connects Little Bull Creek to Thoroughfare Creek. Streams that connect the Pee Dee River to the Waccamaw River include Bull Creek, Thoroughfare Creek, Guendalose Creek/Bullins Creek, Squirrel Creek, Jericho Creek, and Middleton Cut. Carr Creek and Little Carr Creek connect the Pee Dee River to Jericho Creek. There are a total of 112.9 stream miles in this watershed, 354.0 acres of lakes and ponds, and 1,522.3 acres of estuarine areas. The streams are classified FW from the beginning of the watershed to the Pee Dee River's confluence with Thoroughfare Creek. Downstream of the confluence, the river is classified SB* (dissolved oxygen not less than daily average of 5.0 mg/l with a minimum of 4.0 mg/l) and its tributaries are classified SB.

Water Quality

Station #	<u>Type</u>	Class	<u>Description</u>
PD-061	P	FW	PEE DEE RIVER AT US 701 2.75 MILES NE YAUHANNAH
MD-080	P	SB	WINYAH BAY @ MARKER 92 AT MOUTH OF PEE DEE AND
			WACCAMAW RIVERS

Pee Dee River - There are two monitoring stations along this section of the Pee Dee River. Aquatic life uses are not supported at **PD-061** due to occurrences of zinc in excess of the aquatic life acute standards, including high concentrations of zinc measured in 1994 and 1997, and a very high concentration of zinc measured in 1995. In addition, there was a significant decreasing trend in dissolved oxygen. Significant decreasing trends in five-day biochemical oxygen demand, total nitrogen concentration, and total suspended solids suggest improving conditions for these parameters. A very high concentration of lead was measured in the 1994 sediment sample. Recreational uses are fully supported.

MD-080 is physically located in this watershed, but also reflects a mixing area of waters including Winyah Bay (03040207-040) and the Waccamaw River (03040206-150). Aquatic life uses are fully

supported at *MD-080*; however, there is a significant decreasing trend in dissolved oxygen. Significant decreasing trends in five-day biochemical oxygen demand and total suspended solids suggest improving conditions for these parameters. Recreational uses are fully supported and a significant decreasing trend in fecal coliform bacteria concentration suggests improving conditions for this parameter.

A fish consumption advisory has been issued by the Department for mercury and includes the Pee Dee River within this watershed (see advisory p. 115).

NPDES Program

Active NPDES Facilities

RECEIVING STREAM FACILITY NAME PERMITTED FLOW @ PIPE (MGD) COMMENT

CHAPEL CREEK GCW&SD/PLANTERSVILLE WTP PIPE #: 001 FLOW: 0.001 WQL FOR TRC: UNCONSTRUCTED NPDES# TYPE LIMITATION

SC0047660 MINOR DOMESTIC WATER QUALITY

Nonpoint Source Management Program

Mining Activities

MINING COMPANY PERMIT #
MINE NAME MINERAL

JAMES M. MILL, JR. 1073-43 INGLESIDE MINE SAND/CLAY

Water Supply

Portions of this watershed fall within the Waccamaw Capacity Use Area and large groundwater uses must be reported (see Capacity Use Program p.23).

WATER USER (TYPE) STREAM	REGULATED CAPACITY (MGD) PUMPING CAPACITY (MGD)
GSW&SA/BULL CREEK REGIONAL WTP (M)	22.0
BULL CREEK	30.0

Growth Potential

There is a low potential for growth in this watershed, except for the area surrounding the City of Georgetown. A permit to expand the Georgetown treatment facility to 9.0 MGD is in process. This will allow Georgetown to incorporate the City of Andrews and Georgetown County with an expansion for the

city too. Water infrastructure is located in the Plantersville community and areas closer to the City of Georgetown. The portion of the Georgetown area within this watershed should see primarily commercial and residential growth. Outside of this area, the watershed is predominately rural with some agricultural uses and timberlands.

Watershed Protection and Restoration

Special Projects

Establishment of National Wildlife Refuge in Coastal South Carolina

In 1997, the U.S. Fish and Wildlife Service established the **Waccamaw National Wildlife Refuge**. The refuge extends over portions of the Pee Dee River and the Waccamaw River incorporating this watershed along with portions of watersheds 03040206-140 and 03040206-150. The purpose of the refuge is to protect and manage an important coastal river ecosystem, which includes a significant number of rare and endangered species, and large contiguous blocks of riverine wetlands and bottomland hardwood forests that provide habitat for wetland-dependent wildlife. The refuge also provides compatible wildlife-dependent recreational activities, such as hunting, fishing, wildlife observation, and environmental education. The refuge was established due to the cooperative efforts of the Winyah Bay Focus Area Task Force, a regional coalition of federal and state agencies, industry, conservation organizations, and citizens.